

D Sub 1
cont
(SEQ ID NO: 6), YSYLQDSDPDSFQD (Ty 449-462) (SEQ ID NO: 13), and
SYLQDSDPDSFQD (Ty 450-462) (SEQ ID NO: 14).

Please add the following claims.

65. The isolated MHC Class II immunogenic derivative of tyrosinase of claim 64, wherein said derivative is selected from the group consisting of QNILLSNAPLGPQFP (Ty 56-70) (SEQ ID NO: 1), NILLSNAPLGPQFP (Ty 57-70) (SEQ ID NO: 2) DYSYLQDSDPDSFQD (Ty 448-462) (SEQ ID NO: 6), YSYLQDSDPDSFQD (Ty 449-462) (SEQ ID NO: 13), SYLQDSDPDSFQD (Ty 450-462) (SEQ ID NO: 14), YLQDSDPDSFQD (Ty 451-462) (SEQ ID NO: 37) and LQDSDPDSFQD (Ty 452-462) (SEQ ID NO: 38).

D2
Sub 2
66. An isolated MHC Class II immunogenic derivative of tyrosinase, wherein said derivative comprises at least a 9 amino acid segment of a sequence selected from the group consisting of QNILLSNAPVGPQFP (Ty 56-70, L65→V) (SEQ ID NO: 3), QNILLSNVPVGPQFP (Ty 56-70, A63→V and L65→V) (SEQ ID NO: 4), QNILLSNVPLGPQFP (Ty 56-70, A63→V) (SEQ ID NO: 5), DYSYLQDSDPDSSQD (Ty 448-462, F460→S) (SEQ ID NO: 7), DQSYLQDSDPDSFQD (Ty 448-462, Y449→Q) (SEQ ID NO: 8), DFSYLQDSDPDSFQD (Ty 448-462, Y449→F) (SEQ ID NO: 9), DYSFLQDSDPDSFQD (Ty 448-462, Y451→F) (SEQ ID NO: 10), DYSYLQDSVPDSFQD (Ty 448-462, D456→V) (SEQ ID NO: 11) and SYLQDSVPDSFQD (Ty 450-462, D456→V) (SEQ ID NO: 12).

67. An isolated MHC Class II immunogenic derivative of tyrosinase, wherein said derivative is selected from the group consisting of QNILLSNAPVGPQFP (Ty 56-70, L65→V) (SEQ ID NO: 3), QNILLSNVPVGPQFP (Ty 56-70, A63→V and L65→V) (SEQ ID

D2
Sub
E2
cont

NO: 4), QNILLSNVPLGPQFP (Ty 56-70, A63→V) (SEQ ID NO: 5), DYSYLQDSDPDSSQD (Ty 448-462, F460→S) (SEQ ID NO: 7), DQSYLQDSDPDSFQD (Ty 448-462, Y449→Q) (SEQ ID NO: 8), DFSYLQDSDPDSFQD (Ty 448-462, Y449→F) (SEQ ID NO: 9), DYSFLQDSDPDSFQD (Ty 448-462, Y451→F) (SEQ ID NO: 10), DYSYLQDSVPDSFQD (Ty 448-462, D456→V) (SEQ ID NO: 11) SYLQDSVPDSFQD (Ty 450-462, D456→V) (SEQ ID NO: 12), QNFLLSNAPLGPQFP (Ty 56-70, I58→F) (SEQ ID NO: 18), QNVLLSNAPLGPQFP (Ty 56-70, I58→V) (SEQ ID NO: 19), QNILQSNAPLGPQFP (Ty 56-70, L60→Q) (SEQ ID NO: 23), QNILFSNAPLGPQFP (Ty 56-70, L60→F) (SEQ ID NO: 24), QNILVSNAPLGPQFP (Ty 56-70, L60→V) (SEQ ID NO: 25), QNILLSNAVLGPQFP (Ty 56-70, P64→V) (SEQ ID NO: 28), QNILLSNAPQGPQFP (Ty 56-70, L65→Q) (SEQ ID NO: 29), DYSYLQDSDPDSFQD (Ty 448-462, Y451→Q) (SEQ ID NO: 34), DYSYQQDSDPDSFQD (Ty 448-462, L452→Q) (SEQ ID NO: 35), DYSYFQDSDPDSFQD (Ty 448-462, L452→F) (SEQ ID NO: 36).

68. An immunogenic peptide derivative of tyrosine comprising a core binding sequence of formula $X_1LLX_2NX_3X_4LX_5$ (SEQ ID NO: 15) or $X_1LQX_2SX_3X_4DX_5$ (SEQ ID NO: 16) wherein:

X_1 is selected from the group consisting of methionine, leucine, isoleucine, tyrosine, valine, tryptophan and phenylalanine;

X_2 is selected from the group consisting of phenylalanine, tryptophan, leucine, isoleucine, alanine, valine, aspartic acid and glutamic acid;

X₃ is selected from the group consisting of methionine, leucine, threonine, isoleucine, serine and valine;

X₄ is selected from the group consisting of aspartic acid, alanine, serine, valine, histidine, proline, asparagine, methionine, threonine, leucine and isoleucine; and

X₅ is selected from the group consisting of alanine, serine, glutamine, glycine, leucine, valine and threonine.

D2 69. The immunogenic peptide of claim 64 wherein said peptide is recognized by HLA-DR CD4⁺ T lymphocytes.

70. The immunogenic peptide of claim 66 wherein said peptide is recognized by HLA-DR CD4⁺ T lymphocytes.

Sub E2 Cont 71. The immunogenic peptide of claim 68 wherein said peptide is recognized by HLA-DR CD4⁺ T lymphocytes.

72. The immunogenic peptide of claim 64 linked to a MHC Class II molecule.

73. The immunogenic peptide of claim 65 linked to a MHC Class II molecule.

74. The immunogenic peptide of claim 66 linked to a MHC Class II molecule.

75. The immunogenic peptide of claim 67 linked to a MHC Class II molecule.

76. The immunogenic peptide of claim 68 linked to a MHC Class II molecule.

77. The immunogenic peptide-MHC complex of claim 72 wherein said MHC Class II molecule is the β chain of the MHC Class II molecule.